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PATENT  
MEDCOUNT-103

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Maurus Logan  
Serial No. : 10/635,671  
Filed : August 6, 2003  
For : METHOD FOR SECURING CABLE TIES AND THE LIKE  
Examiner : Jack W. Lavinder  
Art Unit : 3677

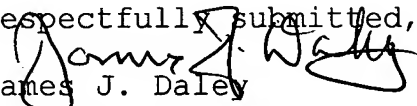
Assistant Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 23313-1450

Sir:

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- (1) SUBSTITUTE APPEAL BRIEF<sup>\*</sup> and
- (2) CERTIFICATE OF MAILING;

Respectfully submitted,  
  
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Reg. No. 24,158  
Attorney for Applicant

\* original and two  
(2) copies

APPLICATION UNDER ACCELERATED EXAMINATION PROCEDURE



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Sir:

SUBSTITUTE APPEAL BRIEF

This paper is filed in response to the PTO communication mailed on December 6, 2005, which advises that the Supplemental Appeal Brief of record is non-compliant.

(1) REAL PARTY IN INTEREST:

The real party in interest is Medcount Systems, L.L.C., by virtue of an Assignment recorded on August 6, 2003 at Reel/Frame 014381/0912.

(2) RELATED APPEALS AND INTERFERENCES

There are no related appeals and interferences.

(3) STATUS OF CLAIMS

Claims 1-8 are pending in the application and all pending claims stand as finally rejected and are appealed.

(4) STATUS OF AMENDMENTS

No amendments have been filed in response to the extant Office Action.

(5) SUMMARY OF THE INVENTION

The present invention relates generally to cable ties and particularly to cable ties having adaptivity to applications presently served by hook and loop fasteners, e.g., the bundling of optical conductors.

With respect to independent Claim 1 on appeal and Figs. 1-4 of the drawings, the invention provides apparatus for bundling conductors including a cable tie 10 having a head 12 and a strap (tail) 14 extending from the head to a free end 16 (Specification, page 6, fifth paragraph).

A cable encircling member 26 has a width exceeding a width of said cable tie tail (Specification, page 6, sixth paragraph; page 4, fifth paragraph).

The cable tie is assembled with the cable encircling member and forms the cable encircling member into a spiral coil interiorly of the cable tie and encircling the conductors (Specification, page 7, first and second paragraphs).

With respect to independent claim 6 and the foregoing referenced drawings, reference numerals and portions of the Specification, the invention provides a method for bundling conductors, comprising the steps of:

(a) providing a cable tie having a head and a strap extending from the head to a strap free end;

(b) providing a cable encircling member having a width exceeding a width of the cable tie strap;

(c) assembling the cable tie and the cable encircling member such that the cable tie strap overlies a first outer surface of the cable encircling member;

(d) forming the cable encircling member into a spiral coil interiorly of the cable tie and encircling the conductors.

Claims dependent on claims 1 and 6 are not separately argued.

(6) ISSUES

The issues now on appeal are:

(a) Is independent claim 1 unpatentable as being anticipated under 35 USC 102 by Fennell Patent No. 4,700,432?

(b) Is independent claim 6 unpatentable under Section 103 over the Fennell patent in view of Farrell Patent No. 5,354,021?

(7) GROUPING OF CLAIMS.

While claims 1 and 6 relate to common subject matter, the disparity of the rejections necessitates that the claims be considered in two groups, namely, Group 1 includes claims 1-5 and Group 2 includes claims 6-8. The claims of each group stand or fall together.

(8) ARGUMENT

(a) THE REJECTION OF CLAIM 1 IS IN ERROR.

(I) Claim 1

Claim 1 reads as follows.

Claim 1 reads as follows, with emphasis identifying content thereof not disclosed or suggested by the Fennell Patent.

1. Apparatus for bundling conductors, comprising:

(a) a cable tie having a head and a strap extending from the head to a strap free end; and

(b) a cable encircling member having a width exceeding a width of said cable tie strap and flat throughout a full length thereof,

said cable tie being assembled with said cable encircling member and forming said cable encircling member from such flat condition into a spiral coil interiorly of said cable tie and encircling said conductors.

Simply put, applicant's cable encircling member is flat throughout a full length thereof and a cable tie is assembled with the cable encircling member and forms the flat cable encircling member from such flat condition into a spiral encircling the conductors.

(II) The Rejection

In explaining the Section 102 rejection, the Examiner advises as follows.

Regarding claim 1, Fennell discloses an apparatus for bundling conductors comprising a cable tie (15) and a flat cable-encircling member (7, 11) having a width exceeding a width of the cable tie strap. Fennell also discloses that the cable-encircling member is flat throughout a full length and is spirally wound about the cables (figure 4) and the cable tie is capable of being wound about the outside of the encircling member. (emphasis added)

(II) The Rejection is Factually Incorrect.

The Examiner's above contention is literally that the Fennell patent "discloses that...the cable tie is capable of being wound about the outside of the encircling member."

Undersigned has scrutinized the Fennell patent for such disclosure. There is no such disclosure nor any suggestion of the above-quoted content of claim 1. The Fennell patent accordingly fails as a Section 102 anticipating reference.

Reliance is placed, e.g., on In re Donohue, 226 USPQ 619 (Fed. Cir. 1985) for the axiom of patent law that anticipation under 35 USC 102 compels reliance on a single prior art reference for disclosure or suggestion of each element of the claim.

(III) The Rejection is in Error as a Matter of Law.

(A) "Capability" of a reference is anathema to a Section 102 rejection.

It is further axiomatic in U.S. patent law that a Section 102 rejection cannot be predicated on a "capability" of a prior art reference. Reliance is placed, e.g., upon Continental Can Co. v. Monsanto, 20 U.S.P.Q. 2d 1746, 1749 (Fed. Cir. 1991):

..."Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain may result from a given set of circumstances is not sufficient"...(quoting In re Oelrich, 666 Fed. 2d 578, 581, 212 U.S.P.Q. 323, 326 (C.C.P.A. 1981)).

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...The Board's theory that these two fastening devices in Wilson were capable of being intermingled to perform the same function as the third and first fastening elements in claim 76 is insufficient to show that the latter device was inherent in Wilson... (emphasis added)

The Examiner clearly relies on the capability of Fennell's device and the rejection accordingly stands in open violation of the foregoing axioms of patent law.

(B) The Examiner has further acknowledged that the non-disclosed Fennell claim 1 limitation is not inherent in the patent.

In the Second Office Action, in rejecting claim 6 over Farrell as a primary reference (and Fennell as a secondary reference), the Examiner advised:

...Fennell fails to disclose wrapping the cable tie about the outer surface of the coiled encircling member.

In the Third Office Action, in rejecting claim 6 over Fennell as a primary reference (and Farrell as a secondary reference), the Examiner advises:

...Fennell fails to disclose wrapping the cable tie about the outer surface of the coiled encircling member.

The Examiner's repeated position on Fennell's lack of teachings in the Section 103 rejections is diametrically opposed to any contention of inherency.

(C) The Actual Teachings of the Fennell patent auger against use of a cable tie exteriorly of a cable encircling member to form the same into a spiral configuration.

Fennell advises as follows.

...Referring to FIG. 3, the present invention is depicted securely semipermanently attached to an elongate member 21. The flexible strap member 1 is semipermanently attached to elongate member 21 by tie 15 which is first partially inserted through slot 13. The ratchet teeth of the tie 15 are engaged after the tie is partially wrapped around a portion of the elongate member. Once the teeth



are engaged, the tie is closed around the elongate member, securing the flexible strap member to the elongate member... (Fennell patent, Col. 2, ls. 58-67)

Fennell applies his cable tie 15 to but single conductor 21 in order to secure his flexible strap member 1 to that single conductor.

Once cable tie 15 is applied to single conductor 21 and secured thereto by cutting the tie strap exiting the cable tie head, as is shown in FIG. 3, flexible strap member 1 is wrapped around a conductor bundle and its releasable VELCRO (registered trademark) locking members (hooks 3 and loops 5) are secured to one another (FIG. 4).

Manifestly, assembling a cable tie about Fennell's device would be fully of no use - Fennell's flexible strap member already has its own fastening elements - its hooks and loops. Per Fennell, the user of his device engages the hooks and loops after it is in encircling relation to conductors, at which point a cable tie wrapped around the flexible strap member could not serve to form the flexible strap member into coiled or spiral form.

The hooks and loops are fundamental to the Fennell approach, which requires device reusability and fastening elements which are on the flexible strap member and can be unlocked to permit reuse (Fennell Patent, Col. 2, ls. 15-22).

(b) THE REJECTION OF CLAIM 6 IS IN ERROR.

(I) Claim 6 reads as follows.

6. A method for bundling conductors,  
comprising the steps of:

(a) providing a cable tie having a head and a strap  
extending from the head to a strap free end;

(b) providing a cable encircling member having a  
width exceeding a width of said cable tie strap and in  
flattened state throughout a full length thereof;

(c) assembling said cable tie and said cable  
encircling member such that said cable tie strap overlies  
a first outer surface of said cable encircling member;  
and

(d) forming said cable encircling member from such  
flattened state into a spiral coil interiorly of said  
cable tie and encircling said conductors. (Emphasis  
added)

Claim 6 is correlative with claim 1, simply put, covering the  
method wherein applicant's cable encircling member is flat  
throughout a full length thereof and a cable tie is assembled with  
the cable encircling member and forms the flat cable encircling  
member from such flat condition into a spiral encircling the  
conductors.

(II) The Rejection

In the reasoning underlying the Section 103 rejection, the  
Examiner advises as follows.

Regarding claim 6, Fennell discloses the method of providing a cable tie (15), a cable-encircling member having a width exceeding a width of the cable tie strap and in a flattened state throughout a full length (7, 9, 11, figure 2) and then forming the encircling member from a flattened state into a spiral coil. Fennell discloses, in combination, a hook and loop fastener with a cable tie strap for connecting the clamp to the conductors. Fennell fails to disclose wrapping the cable tie about the outer surface of the coiled encircling member.

Farrell discloses the method step of providing the encircling member in a spiral coil state and wrapping the cable tie about the outer surface of the spiral wound coil to secure the cable clamp to the conductors. Farrell's cable tie is an alternative design to the use of the hook and loop fastener for securing the cable encircling member about the conductors. They both perform the identical function of securing the encircling member about the conductors equally as well as the other. (emphasis added)

It would have been obvious design choice to a person having ordinary skill in the art to substitute Fennell's hook and loop fastener with a single cable tie surrounding the outer circumference of the encircling member about the conductors...

### (III) The Law on Design Choice

In order for a choice of design to be obvious under 35 USC 103, the adversary to the patent grant must demonstrate that the choice made by the applicant for patent was in fact known to the art. See Ex parte Kaiser, 194 USPQ 47 (Bd. App. 1976). As the PTO Board of Appeals stated, in Ex parte Haas, Connelly and Van Voorhis, 144 USPQ 98, 99 (Bd. App. 1964):

The examiner then says that these are matter of choice. It is not a matter of choice presented by the prior art. The prior art gives only one choice; a process which will not yield these new and improved results. Thus, one of ordinary skill in the art, turning to the prior art to make his choice, would never arrive at the claimed process. (emphasis added)

Note also the following from Ex parte Markowitz, 143 USPQ 303, 305 (Bd. App. 1964):

While these changes may be relatively simple once the advantage for making them has been made clear by appellant's disclosure, there is no suggestion in Ricketts et al. that this should be done. Hence, the Examiner's contention that Ricketts et al. present a matter of choice or design in the selection of driving currents to the person of ordinary skill is true only after appellant's disclosure has shown the way. (emphasis added)

(IV) Errors in the Reasoning re Claim 6

(A) The choices "presented by the prior art" for bundling conductors, as shown in the Fennell and Farrell patent, are, respectively:

(1) the use of a flat cable encircling member having hook and loop type fasteners formed -by user manipulation of the cable encircling member itself - from a flat state into a spiral in encircling relation to the conductors, i.e., a single member; and

(2) the use of a conventional cable tie (head pawl secures the cable tie) encircling a preformed clamp which encircles the conductors, i.e., two members, with user manipulation of not the clamp, but the tie encircling the clamp.

Manifestly, these prior art species do not "both perform the identical function of securing the encircling member about the conductors equally as well as the other, as the Examiner contends. Species (1) directly encircles the conductors and involves a single member. Species (2) involves a preformed clamp in direct encircling relation to the conductors and involves two members.

The method of claim 6 "is not a matter of choice presented by the prior art".

The Examiner's contention that the prior art presents "a matter of choice or design" to one of ordinary skill in the art "is true only after appellant's disclosure has shown the way.

Otherwise put, the step of forming a flat cable encircling member into a spiral about conductors to be bundled by user manipulation of a cable tie is not a matter of design choice under the cited controlling law.

Other considerations undermine the rejection of claim 6, i.e., prior to the combination of the teachings of the primary and secondary references, a modification of the primary reference is necessary and improper at law. Thus, the Examiner must remove the hook and loops from the Fennell cable encircling member, which cannot be formed into a spiral further than that existing upon interengagement of the hooks and loops. Removal of the hooks and

loops takes away the requisite reusability of the Fennell device.

The ultimate question is why an artisan, looking at Farrell, would modify the clearly functional Fennell device to become a two-piece (cable encircling member and Farrell type cable tie)?

The Examiner concludes in the Section 103 reasoning as follows.

...It would have been obvious to one of ordinary skill in the art to substitute Fennell's hook and loop fastener and cable tie strap with a single cable tie surrounding the outer circumference of the encircling member, as taught by Farrell, to provide a simpler means of fastening the clamp to the conductors and reducing the manufacturing costs associated with the elimination of the hook and loop fastening element. (emphasis added)

The above emphasized contention of the Examiner is apparently the "suggestion" requisite to a Section 103 rejection.

It is hardly an answer to the question above proposed. It has no basis in Section 103 law known to the undersigned, and flies in the face of controlling law.

The Federal Circuit has advised that, for an invention to be considered obvious, there need not be an explicit "suggestion" in the prior art. It is only necessary that the inventor applied "knowledge clearly present in the prior art". In re Sernaker, 217 USPQ 1, 6 (1983). In reversing the Board, the Court expressly noted that none of the prior art disclosed what the applicant had done in his invention.

As noted above, species (1) and (2) represent the "knowledge clearly present in the prior art". Matters of simplicity of manufacture and lessening cost thereof are not knowledge relevant to the Sernaker axiom.

(B) The Rejection of Claim 6 Fails as Involving Reliance on a secondary reference which is "non-analogous art".

(I) The Relevance of Past Prosecution

In the Section 103 rejection of claim 6, the Examiner relies on the Farrell patent as a secondary reference. In past prosecution, the Examiner relied on the Farrell patent as an anticipating reference of claim 1 under Section 102 .

As an alleged anticipating reference, the Farrell patent was not subject to a defense of "non-analogous art". With reliance on Farrell now under Section 103, the reference is subject to this defense. Helpful to the analysis of this defense, applicant now sets forth positions of the Examiner on the teachings of the Farrell patent.

The final rejection of claim 1 is relevant.

In explaining the final rejection of claim 1, the Examiner advises as follows.

...Farrell discloses and apparatus for bundling conductors comprising a cable tie (36) and a cable-encircling member (18) having a width exceeding a width

of the cable tie strap. Farrell also discloses that the cable-encircling member is flat throughout a full length, i.e., the encircling member is made from a shape memory plastic material that is flat when completely stretched out and becomes a spiral coil when released from the flat condition. (emphasis added)

Applicant's rebuttal was as follows.

The Farrell patent itself fully belies the emphasized contention of the Examiner.

Farrell calls his cable encircling member to be comprised of two distinct sections, a flat base portion 16 and a loop portion 18.

The loop portion 18 of mounting bracket 12 is formed integral with base portion 16 and mounting bracket 12 is made of a single sheet of plastic or other suitable material that will retain its shape, as shown. The mounting bracket 12 is formed by any process suitable for the material chosen. For plastic, the mounting bracket can be, for example, injection molded or heated and shaped in a mandrel, or stamped and subsequently cold worked. (emphasis added) (Farrell Patent, Col. 3, ls. 60-68)

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Fig. 5 shows the mounting bracket 12 secured to a structural member 50 by means of screw 22. The clamp mechanism 14 is shown as being cut away from the mounting bracket 12 by means of a cutting device 52. Removal of claim mechanism 14 provides access to the wiring harness 40 held by loop portion 18. Upon removal of clamp mechanism 14, application of force to the free end 28 of loop portion 18, as indicated by arrow 56, moves the free end 28 away from the inner surface 24 of loop portion 18 and creates a gap therebetween for insertion and removal of



wires 58, as indicated by arrows 60. Upon the removal or addition of wires, free end 28 is released, and its natural resiliency brings it back into engagement with inner surface 24, thereby closing loop portion 18... (emphasis added) (Farrell Patent, Col. 5, ls. 5-15)

The Examiner's contention that the "encircling member is made from a shape memory plastic material that is flat when completely stretched out and becomes a spiral coil when released from the flat condition" flies in the face of Farrell's fabrication of his encircling member as plastic material that has a shape memory of a spiral coil.

Contrast applicant's claim 6 requirement of "forming said cable encircling member from such flat condition into a spiral coil".

Indeed, stretching Farrell's encircling member to flat condition is anathema to Farrell.

...In addition, when loop portion 18 is opened, as shown in Figs. 5, the wiring harness does not tend to fall out of the loop. The opening in loop 18 is created above the wires. (Farrell Patent, Col. 5, ls. 26-29)

As the record presently stands, the Examiner relies on a contention fully undermined by the alleged anticipating reference itself. Issue is clearly not joined for appeal purposes.

Withdrawal of the final rejection and clarification of the rejection of claim 1 is manifestly required and is respectfully requested.

IN RESPONSE TO THE FOREGOING REBUTTAL OF APPLICANT, THE EXAMINER SHIFTED FROM THE FARRELL PATENT AS A SECTION 102 REFERENCE. IT NEED BE CONCLUDED THAT THE EXAMINER ACCEDES TO APPLICANT'S REBUTTAL.

The law on non-analogous art is as follows.

In the view of the Court of Appeals for the Federal Circuit, a two-step test applies to determine whether a secondary reference is not usable under 35 USC 103 by reason of it standing as "non-analogous art". The following, from In re Deminski, 230 USPQ 313 (1986) is relevant:

The determination that a reference is from a nonanalogous art is therefor two-fold. First, we decide is the reference is within the field of the inventor's endeavor. If it is not, we proceed to determine whether the reference is reasonably pertinent to the particular problem with which the inventor was involved. (230 USPQ at 315).

Applicant's field of endeavor is to bind conductors with a cable tie which forms a flat cable-encircling member into a spiral form about the conductors. By the Examiner's failure (inability) to sustain his contention that the Farrell patent so discloses, it is submitted that the Examiner admits that the Farrell patent is "not within the field of the inventor's endeavor" and fails the first leg of the "two-fold" test.

Proceeding to the second leg of the two-fold test, given the above, it is submitted further that the Farrell patent does not address the particular problem with which

the inventor was involved, i.e., to bind conductors with a cable tie which forms a flat cable-encircling member into a spiral form about the conductors.

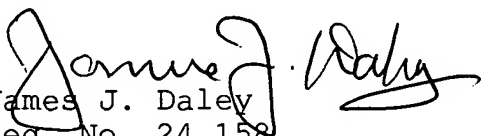
To the extent that a nonanalogous art patent cannot be relied on in a Section 103 rejection, the newly-stated rejection in the extant Office Action fails by admission of the inadequacies in the teachings of the Farrell patent of express content of independent claim 6.

THE REJECTIONS OF CLAIM 1 AND 6 SHOULD BE REVERSED.

Reliance is placed on In re Fine, 5 USPQ 2d 1596, 1600 (Fed. Cir. 1988) and Ex parte Kochan, 131 USPQ 204 (Bd. App. 1960) for allowance of the dependent claims, since they differ in scope from parent independent claims submitted as patentable.

Patentability of all claims is believed to have been established and, as such, it is submitted that this application is now in condition for allowance. Indication to that effect is solicited.

Respectfully submitted,

  
James J. Daley  
Reg. No. 24,158  
Attorney for Applicant

## APPENDIX

There is no need for a "related proceedings appendix", since, as aforesaid, there are no related proceedings.

Likewise, there is no need for an "evidence appendix", since applicant in no way adds to the record as it existed in this application at the time of filing the notice of appeal.

The only required appendix is the "claim appendix", which follows.

### THE CLAIMS ON APPEAL

1. Apparatus for bundling conductors, comprising:

(a) a cable tie having a head and a strap extending from the head to a strap free end; and

(b) a cable encircling member having a width exceeding a width of said cable tie strap and flat throughout a full length thereof, said cable tie being assembled with said cable encircling member and forming said cable encircling member from such flat condition into a spiral coil interiorly of said cable tie and encircling said conductors.

2. The apparatus claimed in claim 1, wherein said cable encircling member defines an aperture extending between first and second outer surfaces of said cable encircling member, said cable tie strap being resident in said aperture.

3. The apparatus claimed in claim 2, wherein said cable tie strap encircles said second outer surface of said cable encircling member and wherein said first outer surface is in engagement with said conductors.

4. The apparatus claimed in claim 1, wherein said cable encircling member defines a passage extending along a first outer surface of said cable encircling member, said cable tie strap being resident in said passage.

5. The apparatus claimed in claim 4, wherein said cable tie strap encircles said first outer surface of said cable encircling member and wherein a second outer surface of said cable encircling member is in engagement with said conductors.

6. A method for bundling conductors, comprising the steps of:

(a) providing a cable tie having a head and a strap extending from the head to a strap free end;

(b) providing a cable encircling member having a width exceeding a width of said cable tie strap and in flattened state throughout a full length thereof;

(c) assembling said cable tie and said cable encircling member such that said cable tie strap overlies a first outer surface of said cable encircling member; and

(d) forming said cable encircling member from such flattened state into a spiral coil interiorly of said cable tie and encircling said conductors.

7. The method claimed in claim 6, wherein said step (c) is practiced by providing an aperture extending between said first and a second surface of said cable encircling member and inserting said strap free end into said aperture.

8. The method claimed in claim 6, wherein said step (c) is practiced by providing a passage extending along one of said first and a second surface of said cable encircling member and inserting said strap free end into said passage.